

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020649**Date Inspected:** 13-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 14E (NWIT # 08330)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3019BB-103

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-055 [Bottom Plate (BP) 3090A to Vertical Shear Plate SA3449A, Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 045246

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2752 Rev-1.

Repair welding of weld joint no: SEG3020BB-010 [Bottom Plate (BP) 3088A to Vertical Shear Plate SA3444A, Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 066038 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2793 Rev-0.

Repair welding of weld joint no: SEG3020BB-073 [Bottom Plate (BP) 3090A to Vertical Shear Plate SA3451A, Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 047864 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2752 Rev-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-114 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3448A, CJP weld at PP126). The welder is identified as 066695 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-116 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3450A, CJP weld at PP126). The welder is identified as 067949 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BE-060 (East cable Anchorage Brace Plate X5072A to Longitudinal Diaphragm (LD) 3049A, Fillet weld at PP126). The welder is identified as 067764 and was observed welding in the 4F position. AB/F QA was identified as Mr. Yan Bao Jia. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-117 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3451A, CJP weld at PP126). The welder is identified as 067888 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The SMAW process on weld joint no: SEG3020U-588 (Anchor Plate (AP) 3032A to Bottom Plate (BP) 3087A/3088A, CJP weld at PP126). The welders are identified as 067707, 067904 and 067588 and were observed welding in the 2G position. AB/F QA was identified as Mr. Yan Bao Jia. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

The Flux Cored Arc Welding (FCAW) process on weld joint no: SA3446-012 (East cable Anchorage Brace Plate X5056D to East cable Anchorage Brace Plate X5074D, Partial Joint Penetration (PJP) weld at PP126). The welder is identified as 066421 and was observed welding in the 1G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2231-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

---